L Number	Hits	Search Text	DB	Time stamp
1	385588	(primary or second$6 or backup or back-up or (back adj1 up) or standby or redundan$4 or spare$4) same (processor or cpu or controller)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/05/26 16:57
2	2091	((primary or second$6 or backup or back-up or (back adj1 up) or standby or redundan$4 or spare$4) same (processor or cpu or controller)) same router	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/05/26 16:33
3	37	(((primary or second$6 or backup or back-up or (back adj1 up) or standby or redundan$4 or spare$4) same (processor or cpu or controller)) same router) same (switch$6 adj1 fabric)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/05/26 16:59
4	7	(fail$6 or fault$6 or problem or error$4 or malfunction) same ((((primary or second$6 or backup or back-up or (back adj1 up) or standby or redundan$4 or spare$4) same (processor or cpu or controller)) same router) same (switch$6 adj1 fabric))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/05/26 16:45
5	35	(fail$6 or fault$6 or problem or error$4 or malfunction) and ((((primary or second$6 or backup or back-up or (back adj1 up) or standby or redundan$4 or spare$4) same (processor or cpu or controller)) same router) same (switch$6 adj1 fabric))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/05/26 16:45
6	28	((fail$6 or fault$6 or problem or error$4 or malfunction) and ((((primary or second$6 or backup or back-up or (back adj1 up) or standby or redundan$4 or spare$4) same (processor or cpu or controller)) same router) same (switch$6 adj1 fabric))) not ((fail$6 or fault$6 or problem or error$4 or malfunction) same ((((primary or second$6 or backup or back-up or (back adj1 up) or standby or redundan$4 or spare$4) same (processor or cpu or controller)) same router) same (switch$6 adj1 fabric)))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/05/26 16:45
7	26	(((fail$6 or fault$6 or problem or error$4 or malfunction) and ((((primary or second$6 or backup or back-up or (back adj1 up) or standby or redundan$4 or spare$4) same (processor or cpu or controller)) same router) same (switch$6 adj1 fabric))) not ((fail$6 or fault$6 or problem or error$4 or malfunction) same ((((primary or second$6 or backup or back-up or (back adj1 up) or standby or redundan$4 or spare$4) same (processor or cpu or controller)) same router) same (switch$6 adj1 fabric)))) and (7$/$.ccls. or 37$/$.ccls.)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/05/26 16:48

8	42465	(primary or second$6 or backup or back-up or (back adj1 up) or standby or redundan$4 or spare$4) adj2 (processor or cpu or controller)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/05/26 16:58
9	3	((primary or second$6 or backup or back-up or (back adj1 up) or standby or redundan$4 or spare$4) adj2 (processor or cpu or controller)) same (switch$6 adj1 fabric) same router	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/05/26 16:59

DOCUMENT-IDENTIFIER: US 20030120991 A1

TITLE: Processor with packet data flushing feature

---------- KWIC ---------

Abstract Paragraph - ABTX (1):
A network **processor** or other type of **processor** includes first classification circuitry, scheduling circuitry and **second** classification circuitry. The first classification circuitry is configured to determine for a given packet received by the **processor** whether the packet has one or more **errors**. The scheduling circuitry in an illustrative embodiment receives an indication of the **error** determination made by the first classification circuitry, and based on the indication controls the dropping of the given packet from the **processor** memories if the packet has one or more **errors**, e.g., via a flush transmit command. The **second** classification circuitry, which may be implemented as a single classification engine or a set of such engines, may be configured to perform at least one classification operation for the given packet, e.g., if the packet is supplied thereto by the scheduling circuitry. Particular classification operations performed by at least one of the first and **second** classification circuitry are programmable via software that may be supplied to the **processor** via an associated host device. The **processor** may be configured as a network **processor** integrated circuit to provide an interface between a network and a **switch fabric in a router** or switch.

DOCUMENT-IDENTIFIER: US 20020144175 A1

TITLE: Apparatus and methods for fault-tolerant computing
using a switching fabric

---------- KWIC ---------

Detail Description Paragraph - DETX (40):
[0056] In one embodiment of a **fault**-tolerant computer system 20, the system includes a first and **second CPU** nodes 151 and 151' (generally 151), one or more I/O nodes 170a, . . . 170n, 170m (generally 170), the **switching fabric** 150, and a first and **second** voting module 153, 153' (generally 153). Each of the end nodes 151, 170 is in communication with the **switching fabric** 150 through at least one communications link 160. The **switching fabric** 150 includes network components, such as switches, **routers,** repeaters, and transceivers interconnected through communications links 160. The communications links 160 may be serial communication links, parallel links, or broadband links. The communications links 160 may be implemented with "twisted-pair" cable, coaxial cable, fiberoptic cable, or wireless links, such as radio links or free-optics links.

US-PAT-NO: 6741552

DOCUMENT-IDENTIFIER: US 6741552 B1

TITLE: Fault-tolerant, highly-scalable cell switching architecture

---------- KWIC ---------

Detailed Description Paragraph Table - DETL (1):
TABLE 1 Glossary ABR Available Bit Rate ATM Asynchronous Transfer Mode
CBR Constant Bit Rate CEC Cell Exchange Cycle of SCS **Router** CLP Cell Loss
Priority field in ATM cell header EPD Early Packet Discard - packet discard
mode where entire packet discarded in anticipation of buffer overflow egress
referring to the SSE component that handles cells exiting the switch Gbps
Gigabits Per **Second** GFC Generic Flow Control - field in ATM cell header HEC
Header **Error** Correction - field in ATM cell header HOL Head of Line Blocking -
Occurs in input buffered Blocking switches when a cell at head of input queue
can't be accepted by switch because the required output resource is unavailable, but prevents a following cell whose output resource is available
from moving through switch. hotspot a sink whose delivery capacity has been
exceeded sink and deliverable cells are being retrograded ingress referring
to the SSE component that handles cells input to the switch MIN Multi-Stage
Interconnection Network IP Internet Protocol IPD Injection Packet Discard -
packet discard mode at ingress SSE(s) initiated to alleviate congestion at
egress SSE OAM referring to Operations and Maintenance cell - as indicated by
a setting of the PTI field. Switch avoids discarding OAM cells, and may
perform additional control processing on them. PCB Printed Circuit Board PCR
Peak Cell Rate - cell transmission rate negotiated at call setup for ATM
calls. Limits the burst rate of a call. PPD Partial Packet Discard - packet
discard mode where remainder of packet discarded upon buffer overflow PBI
Packet Boundary Indicator - a setting of PTI field to indicate the end of the
packet. Switch avoids discarding a PBI cell. PTI Payload Type

Indicator -
field in ATM cell header QoS Quality Of Service SCR Sustained Cell
Rate -
cell transmission rate negotiated at call set-up for ATM calls. Limits
the
aggregate bandwidth consumed by the call. SCS Saturated Constant
Shuffle
Routing Algorithm Algorithm for Hypercubes SCS **Switch Fabric** Element
implementing SCS Algorithm **Router** SE Switching Element: a **router**
(e.g., SCS
Router), typically coupled with an SSE. sink destination port of call
source
input port of call SONET Synchronous Optical Network SSAC Source Sink
ATM
Controller - ATM specific SSE SSE Source Sink Element - provides
ingress and
egress port functions for hypercube generic cell switch UBR
Unspecified Bit
Rate VBR Variable Bit Rate VC Virtual Channel - shorthand for call
switched
on VC basis VCN Virtual Channel Number - internal switch call
identifier,
serves as index to VCR in VCR Table VCOP Virtual Channel Output
Process - cell
output process to manage access to output process VCQ VC Queue - per
VC
private queue space used for resequencing incoming cells and buffer
output
ready cells at egress port of switch VCR Virtual Channel Record -
stores call
state information at switch ports VCR Virtual Channel Record Table -
table of
call Table state information VLSI Very Large Scale Integration VP
Virtual
Path - a logical association or bundle of VCs VPI/VCI Virtual Path
Identifier/ Virtual Channel Identifier - ATM cell header field
identifying
call

US-PAT-NO: 6078963

DOCUMENT-IDENTIFIER: US 6078963 A

TITLE: Router with de-centralized processing using intelligent ports

---------- KWIC ---------

Detailed Description Text - DETX (20):
Referring to FIG. 3, an intelligent **router** port 103 may maintain a routing table and/or a route cache table by first receiving a routing protocol packet (step 300) from another network node external to the **router** 100 via the external interface 201 and/or from another intelligent **router** port 103 within the **router** 100 via the internal interface 202. These interfaces 201, 202 may perform physical (OSI Layer 1) and/or data link (OSI Layer 2) layer processing of the routing protocol packet (step 305). The Layer 1 and 2 functions may include, for example, electrical circuit control, data bit transfer, data **error** detection, and/or data **error** recovery. After receiving and processing the routing protocol packet, the interfaces 201, 202 may transfer the routing protocol packet to the bus 205. The **processor** 200 may receive the routing protocol packet via the bus 205 and may update routing tables stored in the first level cache, **second** level cache, and/or routing table data storage 222 (step 310). The **processor** 200 may also broadcast a routing update to the other intelligent **router** ports 103, for instance across the **switching fabric** 102. The **processor** 200 may further forward a routing update to neighboring **routers** in the network using well-known protocols such as RIP, OSPF, and/or BGP4.